**Ch. 11 Honors Bio Test Answer Key**

1. Any two of the following:

**Incomplete dominance-** no dominant or recessive alleles, phenotype of heterozygous individuals is a mixture of two traits

ex. Pink flowers

**Codominance**- alleles are equally dominant, heterozygous individuals show both traits in phenotype

ex. cow coat color, human blood type AB

**Multiple alleles-** certain genes have more than two different alleles

ex. rabbit fur color, human blood types

**Polygenic traits-** traits controlled by two or more genes

ex. human skin tone

2 pts for each type of inheritance pattern, 2 point for each example.

Question: 8 points total

1. a. The male’s genotype should be Ll (heterozygous) because he has a long tail so he needs at least one dominant allele (L), and he has a short tailed parent from which he would receive one short allele (l). Punnett square should show that one parent had two recessive alleles, so this is why the male would receive a recessive allele.

2 points for correct genotype, 1 point for Punnett square, 2 points for explanation

b. Phenotypic ratio- 8 normal pigmented, PTC tasting : 8 normal, no PTC tasting

1 point for parents genotypes, 3 points for correct Punnett square, 4 points for correct ratios

Question: 13 points total

1. Steps of Meiosis:

2 points for a correct description of the phase

1 point for correct drawing (with correct number of chromosomes)

1 point for correct labeling

Interphase, Prophase I, Metaphase I, Anaphase I, Telophase/Cytokinesis I, Prophase II, Metaphase II, Anaphase II, Telophase/Cytokinesis II

Question: 36 points total

1. Genotypic ratio- 1 AO : 1 BO

Phenotypic ratio- 1 type A : 1 type B

1 point for parental genotypes, 3 points for Punnett Square, 4 points for correct ratios

Question: 8 points total

1. a. 25%

b. 25%

c. 50%

1 point identify parents genotypes, 3 points Punnett square, 2 points for each percentage answer

Question: 10 points total

TEST TOTAL: 75 points